WHAT IS CLAIMED IS:

1. An imaging apparatus comprising:

image pickup means;

storing means for storing moving image data output from the image pickup means;

detecting means for detecting that free space of a storage capacity of the storing means becomes not more than a predetermined amount;

communicating means for transmitting the moving image data to an external device; and

controlling means for controlling the image pickup means and the communicating means according to output of the detecting means provided during photographing a series of the moving image data so as to start to transmit the moving image data stored in the storing means to the external device, while photographing the moving image data.

2. An apparatus according to claim 1, wherein the controlling means further controls the communicating means so that the communicating means outputs a control signal for saving the series of moving image data transferred to the external device as one file in case of transmission operation of the series of moving image data.

3. An apparatus according to claim 1, wherein

the controlling means controls the storing means so that the storing means continues to store the moving image data obtained by the image pickup means even after starting the transmission of the moving image data.

4. An apparatus according to claim 1, wherein the controlling means displays information for directing connection between the external device and the communicating means on a display device according to the output of the detecting means, in the case where the external device and the communicating means are not connected to each other through a transmission line.

5. An apparatus according to claim 4, wherein the controlling means controls the image pickup means and the communicating means so that photographing is stopped without transmitting the moving image data to the external device, in the case where, even after the output of the detecting means, the external device and the communicating means are not connected and the free space of the storing means has run out.

6. An apparatus according to claim 1, wherein the controlling means displays information for showing that the transmission of the moving image

data is started on the display device according to the output of the detecting means.

7. An apparatus according to claim 1, further comprising:

directing means for directing stop of photographing; and

writing means for reading out the moving image data stored in the storing means and writing the read-out moving image data in a storage device,

wherein the controlling means controls the writing means so that the writing means saves the series of moving image data stored in the storing means during a period from start of photographing of the series of moving image data to stop of photographing as one file in the storage device, in the case where a direction of the stop of photographing is given from the directing means without receiving the output of the stop of detecting means after the start of photographing.

8. An apparatus according to claim 1, further comprising directing means for directing stop of photographing,

wherein the controlling means controls the storing means so that the storing means saves the series of moving image data stored in the storing means during

a period from photographing start of the series of moving image data to stop of photographing as one file, in the case where a direction of the stop of photographing is given from the directing means without receiving the output of the detecting means after the photographing start.

9. An apparatus according to claim 1, wherein the storing means includes a first memory, a second memory, and a memory interface which controls write and readout of the moving image data to the first memory and the second memory, and the controlling means controls the storing means and the communicating means so that when the detecting means detects that the free space of the first memory has become not more than the predetermined amount during writing the photographed moving image data into the first memory, the moving image data is written in the second memory while the first memory is changed to the second memory and transmission of the moving image data stored in the first memory to the external device is started.

10. An apparatus according to claim 1, wherein the communicating means transmits the moving image data at a rate faster than a data rate of the moving image data output from the image pickup means, the

controlling means controls the communicating means so that after starting the transmission to the external device, the transmission is stopped in response to completion of the transmission of the moving image data having an amount concerning detection timing performed by the detecting means.

11. An apparatus according to claim 10, wherein the controlling means further controls the communicating means so that after stopping the transmission of the moving image data, transmission of the moving image data stored in the storing means to the external device is started in response to reception of the output of the detecting means again.

12. An imaging apparatus comprising:

image pickup means;

an memory interface for writing moving image data output from the image pickup means in a memory and reading out the moving image data from the memory;

writing means for writing the moving image data in a storage device;

detecting means for detecting that free space of a storage capacity of the storing means becomes not more than a predetermined amount;

communicating means for transmitting the moving

image data to an external device; and

controlling means for according to output of the detecting means provided during photographing a series of the moving image data, starting to transmit the moving image data stored in the memory to the external device while photographing the moving image data and writing the moving image data output from the image pickup means in the storage device while the memory is changed to the storage device.

13. An image data processing system comprising:

image pickup means;

storing means for storing moving image data output from the image pickup means;

detecting means for detecting that free space of a storage capacity of the storing means becomes not more than a predetermined amount;

communicating means for transmitting the moving image data through a transmission line;

controlling means for controlling the image pickup means and the communicating means so that according to output of the detecting means provided during photographing a series of the moving image data, transmission of the moving image data stored in the storing means to the external device is started, while the controlling means photographs the moving image data;

receiving means for receiving the moving image data transmitted from the communicating means through the transmission line; and

saving means for saving the moving image data received by the receiving means.

14. A system according to claim 13, wherein the controlling means further controls the communicating means so that the communicating means outputs a control signal for saving the series of moving image data transferred to the external device, as one file in case of transmission operation of the series of moving image data, and wherein the retaining means saves as one file the series of moving image data which is received according to the control signal by the receiving means.

15. A system according to claim 13, wherein the controlling means controls the storing means so that the storing means continues to store the moving image data obtained by the image pickup means even after starting the transmission of the moving image data.

16. A system according to claim 13, wherein the controlling means displays information for directing connection between the external device and the communicating means on a display device according to

the output of the detecting means, in the case where the communicating means and the receiving means are not connected to each other through the transmission line.

17. A system according to claim 16, wherein the controlling means controls the image pickup means and the communicating means so that photographing is stopped without transmitting the moving image data to the receiving means, in the case where, even after the output of the detecting means, the communicating means and the receiving means are not connected and the free space of the storing means has run out.

18. A system according to claim 13, wherein the controlling means displays information for showing that the transmission of the moving image data is started on the display device, according to the output of the detecting means.

19. An imaging method comprising:

an image pickup step;

a storing step of storing moving image data output in the image pickup step;

a detecting step of detecting that free space of a storage capacity of the storing step becomes not more than a predetermined amount;

a communicating step of transmitting the moving image data to an external device; and

a controlling step of controlling the image pickup step and the communicating step according to output of the detecting step provided during photographing a series of the moving image data so as to start to transmit the moving image data stored in the storing step to the external device, while photographing the moving image data.

20. An imaging method comprising:

an image pickup step;

an memory interface of writing moving image data output in the image pickup step in a memory and for reading out the moving image data from the memory;

a writing step of writing the moving image data in a storage device;

an detecting step of detecting that free space of a storage capacity of the storing step becomes not more than a predetermined amount;

a communicating step of transmitting the moving image data to an external device; and

a controlling step of according to output of the detecting step provided during photographing a series of the moving image data, starting to transmit the moving image data stored in the memory to the

external device while photographing the moving image data and writing the moving image data output from the image pickup step in the storage device while the memory is changed to the storage device.

21. An image data processing method comprising:

an image pickup step;

a storing step of storing moving image data output in the image pickup step;

a detecting step of detecting that free space of a storage capacity of the storing step becomes not more than a predetermined amount;

a communicating step of transmitting the moving image data through a transmission line;

a controlling step of controlling the image pickup step and the communicating step so that according to output of the detecting step provided during photographing a series of the moving image data, transmission of the moving image data stored in the storing step to the external device is started, while the controlling step photographs the moving image data;

a receiving step of receiving the moving image data transmitted in the communicating step through the transmission line; and

a saving step of saving the moving image data received in the receiving step.